



9446A Anniversary Series Power Amplifier

SERVICE INSTRUCTIONS

* * * CAUTION * * *

NO USER SERVICEABLE PARTS INSIDE. EXTREMELY HAZARDOUS VOLTAGES AND CURRENTS MAY BE ENCOUNTERED WITHIN THE CHASSIS. THE SERVICING INFORMATION CONTAINED WITHIN THIS DOCUMENT IS ONLY FOR USE BY ALTEC LANSING'S AUTHORIZED WARRANTY REPAIR STATIONS AND QUALIFIED SERVICE PERSONNEL. TO AVOID ELECTRIC SHOCK, DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO. OTHERWISE, REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL.

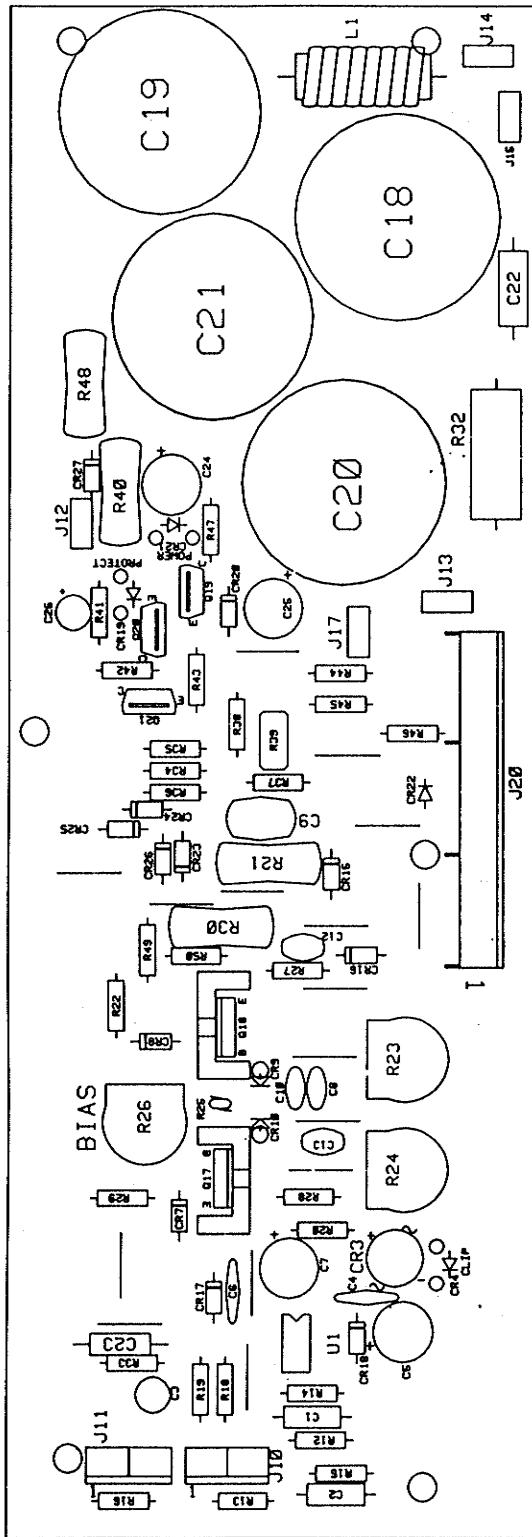


Figure 12 Component Silkscreen Layout of Main Channel Board

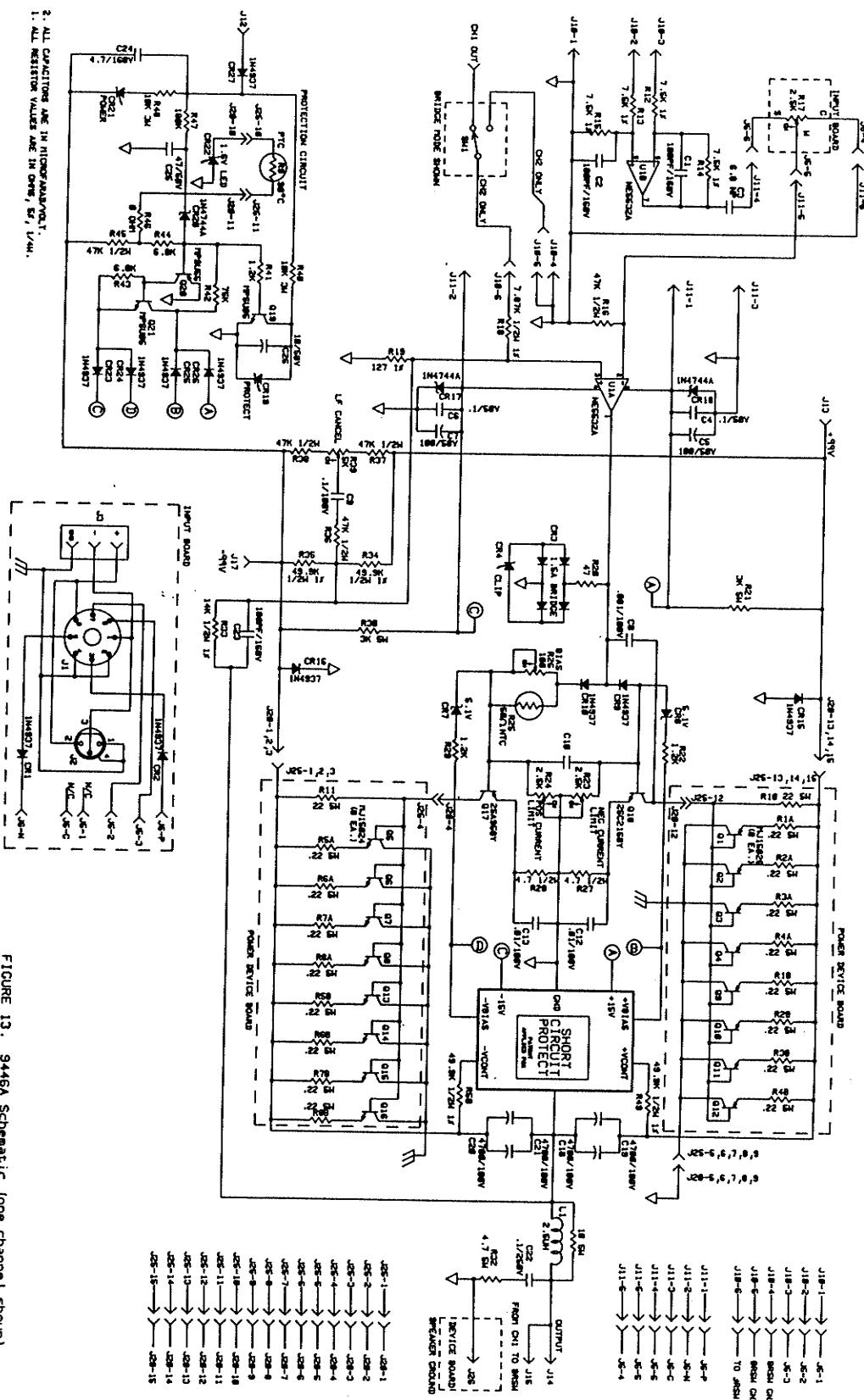


Figure 13 Schematic of 9446A (DWG No. 11D697), One Channel. Sheet 1 of 2

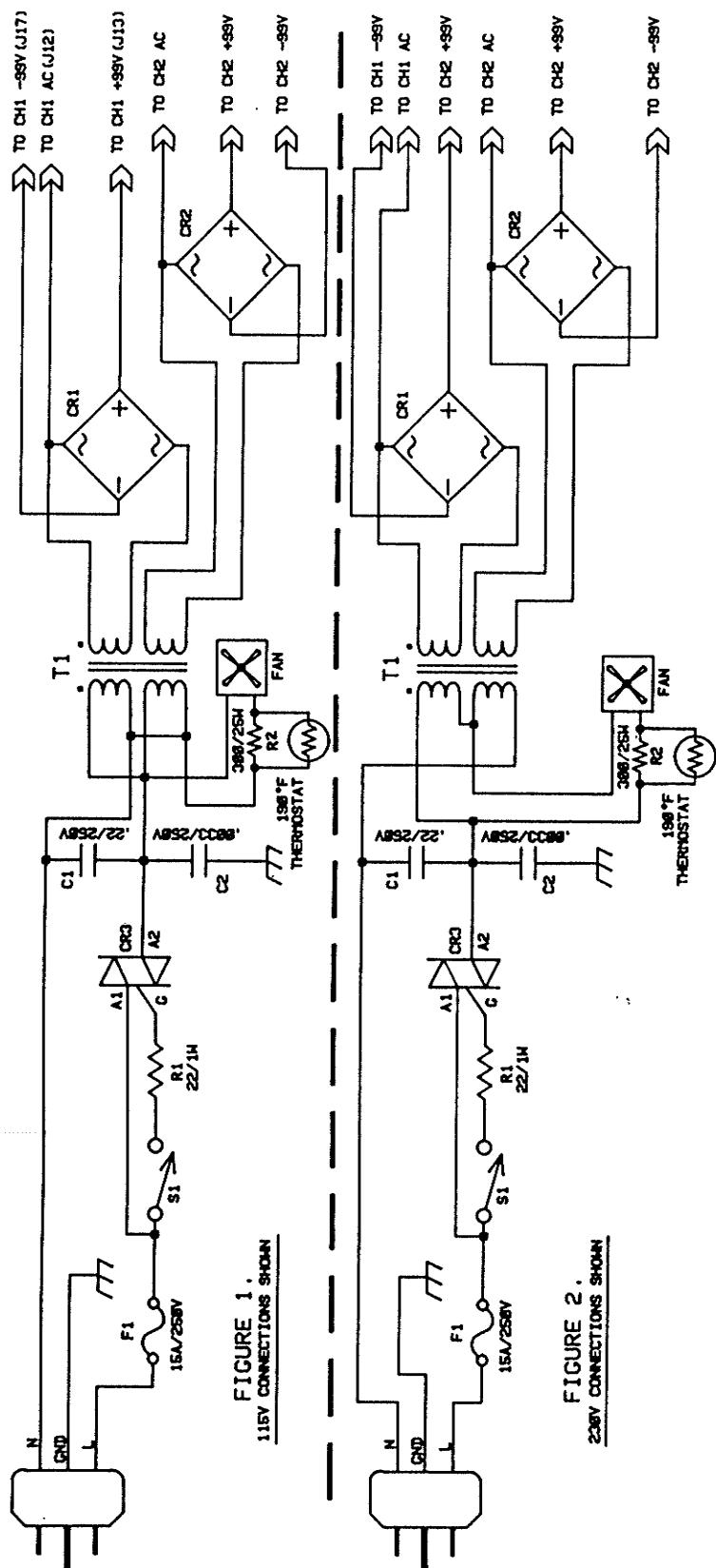


Figure 13 Continued, Schematic of Power Supply, Sheet 2 of 2

Component Parts Listing for the 9446A

Reference Designator	Ordering Number	Name and Description
R1, R2, R3, R4, R5, R6, R7, R8	47-09-125029	Resistor, $2 \times 0.22 \Omega$, 5 watt, 5%
R9	53-01-125094	Resistor, 100Ω @ 25°C , Positive Temperature Coefficient
R10, R11	47-01-125064	Resistor, 22Ω , 5 watt, 5%
R12, R13, R14, R15	47-03-124805	Resistor, $7.5 \text{ k}\Omega$, 0.25 watt, 1%, metal film
R16, R36, R37, R38, R45	47-01-028404	Resistor, $47 \text{ k}\Omega$, 0.5 watt, 5%, carbon film
R17	47-06-124795	Potentiometer, $2.5 \text{ k}\Omega$, log taper, rotary PC mount
R18	47-01-125106	Resistor, $7.87 \text{ k}\Omega$, 0.5 watt, 1% metal film
R19	47-01-125099	Resistor, 127Ω , 0.25 watt, 1% metal film
R20	47-01-125101	Resistor, 47Ω , 0.25 watt, 5% carbon film
R21, R30	47-01-125102	Resistor, $3 \text{ k}\Omega$, 5 watt, 5%
R22, R29, R41	47-01-102080	Resistor, $1.2 \text{ k}\Omega$, 0.25 watt, 5% carbon film
R23, R24	47-06-125100	Trimpot, $2.5 \text{ k}\Omega$, 0.25 watt, horizontal mount with shaft
R25	47-09-125021	Resistor, 50Ω @ 25°C , Negative Temperature Coefficient
R26	47-06-125035	Trimpot, 100Ω , 0.25 watt, horizontal mount with shaft
R27, R28	47-01-102208	Resistor, 4.7Ω , 0.5 watt, 5%
R32	47-01-124834	Resistor, 4.7Ω , 5 watt, 5%
R33	47-03-125105	Resistor, $14 \text{ k}\Omega$, 0.5 watt, 1% metal film
R34, R35, R49, R50	47-03-125033	Resistor, $49.9 \text{ k}\Omega$, 0.5 watt, 1% metal film
R39	47-06-125104	Trimpot, $5 \text{ k}\Omega$, 0.15 watt, vertical mount
R40, R48	47-01-125066	Resistor, $10 \text{ k}\Omega$, 3 watt, 5%
R42	47-01-102124	Resistor, $75 \text{ k}\Omega$, 0.25 watt, 5% carbon film
R43, R44	47-01-102098	Resistor, $6.8 \text{ k}\Omega$, 0.25 watt, 5% carbon film
R46	21-01-110310	Resistor, 0Ω jumper
R47	47-01-109298	Resistor, $180 \text{ k}\Omega$, 0.25 watt, 5% carbon film
C1, C2, C23	15-06-037468	Capacitor, 100 pF , 160 volt, 5%, polypropylene
C3	15-01-125026	Capacitor, $6.8 \mu\text{F}$, 50 VDC, non-polar, Aluminum
C4, C6	15-02-124437	Capacitor, $0.1 \mu\text{F}$, 50 VDC, ceramic disk
C5, C7	15-01-124503	Capacitor, $100 \mu\text{F}$, 50 VDC, Aluminum
C8	15-06-124587	Capacitor, $0.001 \mu\text{F}$, 100 VDC, 5%, polypropylene
C9	15-06-124637	Capacitor, $0.1 \mu\text{F}$, 100 VDC, 5%, polypropylene
C12, C13	15-06-124588	Capacitor, $0.01 \mu\text{F}$, 100 VDC, 5%, polypropylene
C18, C19, C20, C21	15-01-036110	Capacitor, $4700 \mu\text{F}$, 100 VDC, Aluminum, 10%
C22	15-06-100113	Capacitor, $0.1 \mu\text{F}$, 250 VDC, 10%, Polyester
C24	15-01-125024	Capacitor, $4.7 \mu\text{F}$, 160 VDC, Aluminum
C25	15-01-124508	Capacitor, $47 \mu\text{F}$, 50 VDC, Aluminum
C26	15-01-124502	Capacitor, $10 \mu\text{F}$, 50 VDC, Aluminum
L1	56-01-026510	Inductor, $2.0 \mu\text{H}$, choke
CR1, CR2, CR9, CR10, CR15, CR16, CR23, CR24, CR25, CR26, CR27	48-01-125067	Diode, 1N4937, fast recovery rectifier
CR3	48-02-037580	Bridge Rectifier, 1.5 Amp, 70 V
CR4, CR19, CR21	39-01-124540	LED, red, with 12 inch leads
CR7, CR8	48-01-122988	Zener, 1N5231B, 5.1 volt, 0.5 watt, 5%
CR11, CR13, CR17, CR18, CR20	48-01-125098	Zener, 1N4744A, 15.0 volt, 1 watt, 5%
CR22	39-01-121926	LED, red, T1-3/4
U1	17-01-122832	IC, NE5532A
Q1, Q2, Q3, Q4, Q9, Q10, Q11, Q12	48-03-122979	Transistor, MJ15025, PNP
Q5, Q6, Q7, Q8, Q13, Q14, Q15, Q16	48-03-122978	Transistor, MJ15024, NPN

Reference Designator	Ordering Number	Name and Description
Q17	48-03-124475	Transistor, 2SA958Y, PNP
Q18	48-03-124474	Transistor, 2SC2168Y, NPN
Q19, Q21	48-03-028711	Transistor, MPS-U05, NPN
Q20	48-03-028712	Transistor, MPS-U55, PNP
C1	15-02-124994	Capacitor, 0.22 μ F, 250 VAC
C2	15-02-125108	Capacitor, 0.0033 μ F, 250 VAC
CR1, CR2	48-02-122651	Bridge Rectifier, 25 amp, 400 volt
CR3	48-02-125089	Triac, Q4025P, 25 amp, 400 volt
F1	51-04-125092	Fuse, 15 amp, 250 volt, Time Delay
R1	47-01-102224	Resistor, 22 Ω , 0.5 watt, 5%
S1	51-02-124582	Switch, power
T1	56-08-027872	Transformer, power
TS1	53-01-124572	Thermostat, 170 °F, normally open
	28-13-026422	Hardware, rack mount
(F1)	51-04-122930	Fuse, 8 amp, 250 volt, NB-UL-CER
	35-01-124521	Fan, equipment cooling, 100 CFM
	47-02-123106	Resistor, 300 Ω , 25 watt, 5%